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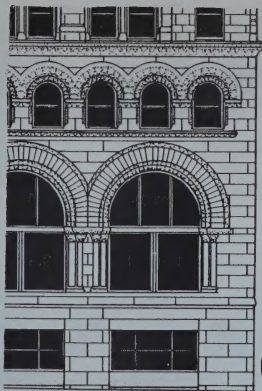
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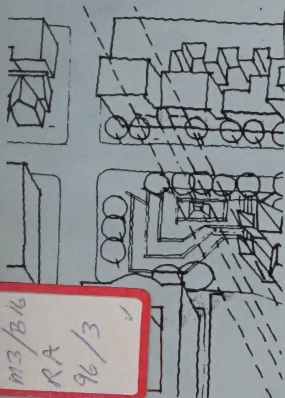
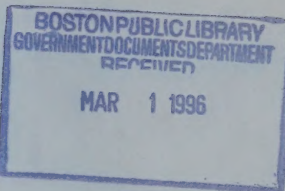
Facade Materials



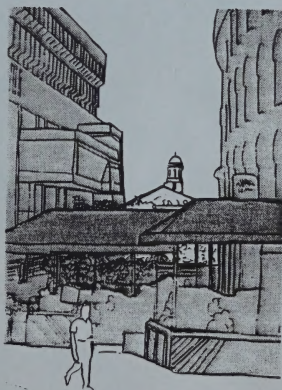
Facade Design

gov. 96-784 XEROX

# Boston Tomorrow Special Studies



Urban Squares



Urban Views

Boston  
Redevelopment  
Authority

(Circa 1997?)

MB/B16  
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# Boston Tomorrow Special Studies

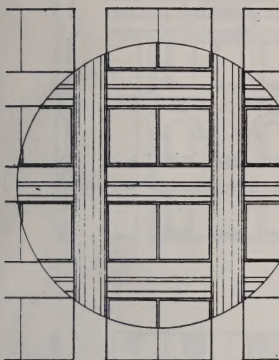
## Summary

This report provides a summary of special studies which have been undertaken with the assistance of local graduate design students as part of the Boston Tomorrow project.

Boston Tomorrow is a project of the Boston Redevelopment Authority to prepare development guidelines for Central Boston. Reports on the Issues of Development and draft General Policies have been published. These are being followed by a process to study and identify microclimate standards, priority growth areas, general comprehensive development guidelines, and district design guidelines.

In order to better understand certain urban design aspects of Boston which these guidelines will need to consider, the influence on the public realm of facade materials and design and of urban squares and views has been explored.

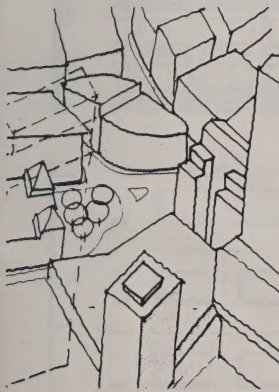
The insights afforded by these studies should assist city planners, public reviewers, developers, and architects in producing projects which fit in with Boston's character and enhance its urban fabric.



**Facade Materials**



**Facade Design**



**Urban Squares**



**Urban Views**





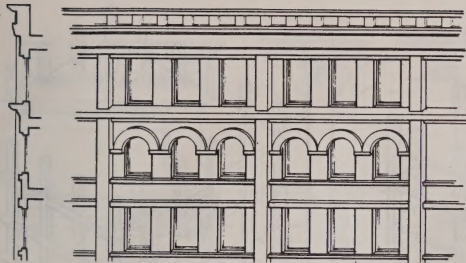
# Facade Materials

## Introduction

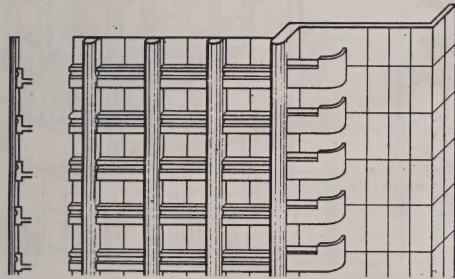
The look of a building - its overall composition, its color, and its detailing - derive from the choice of facade material and how the architect, influenced by construction method and current styles, treats that material in the building's design.

The traditional image of Boston can be characterized by heavy masonry structures of brick and stone. Over a period of two centuries buildings of numerous styles embodied special qualities of human scale and visual character - a positive result of the limitations of construction methods, available materials, and architectural traditions.

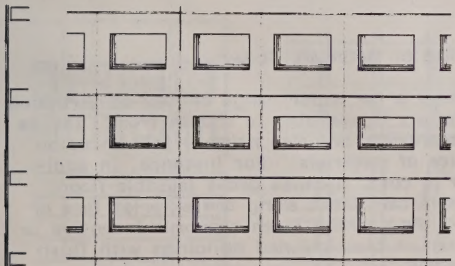
Since the 1940s, with technological advances in construction methods and materials and with the popularity of the "International Style", a wider range of designs have been built in Boston. By better understanding both traditional and modern building materials, the creative potentials of today can be harnessed within the scale and character representative of Boston.



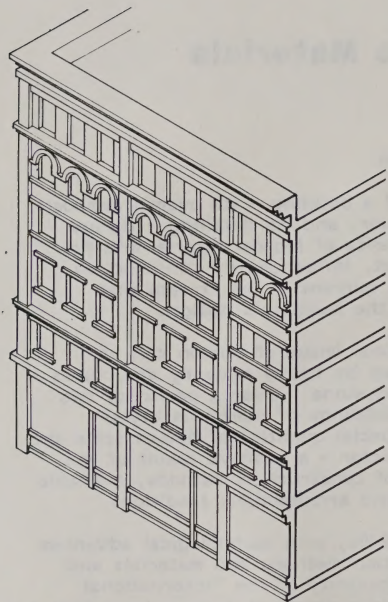
**Brick**



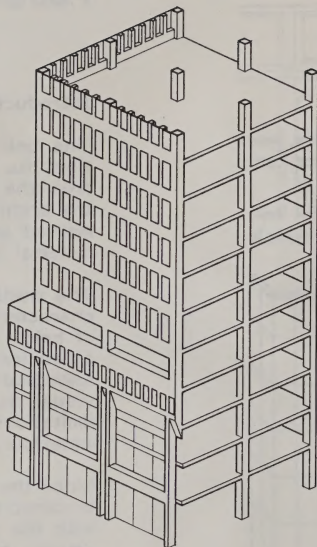
**Concrete**



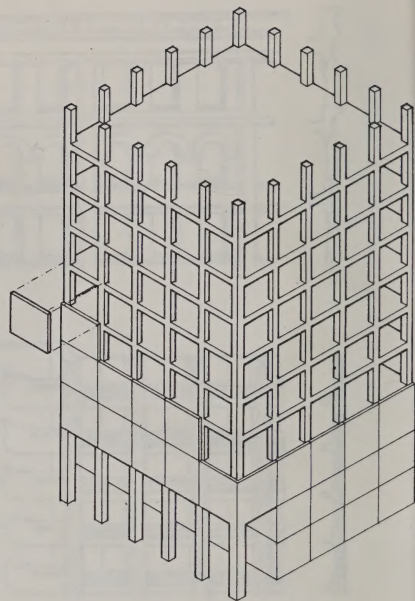
**Panel**



**Brick**



**Concrete**



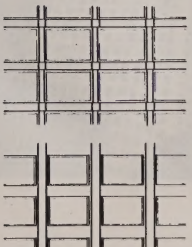
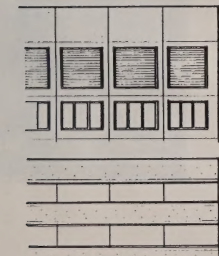
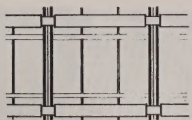
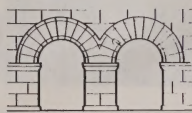
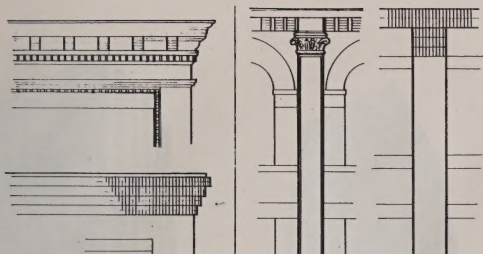
**Panel**

#### Traditional Choice of Materials

Traditionally, with wood, brick, and stone as the only available building materials, issues of fire protection and contemporary attitudes about appropriateness and prestige dictated the series of masonry buildings from brick warehouses and granite institutions to limestone and terra-cotta commercial blocks.

#### Choice of Materials Today

Today, a far wider range of new construction materials is available to choose from. Issues of economics are also primary influences on choice of materials. For instance, in addition to cost, because gross leasable floor area is calculated along the exterior face of a building, there is an economic incentive to construct taut-skinned buildings with flush windows.



Traditionally, brick was used in a load-bearing capacity, forming massive solid walls which served as both structure and enclosure. Today, brick is generally used as a surface veneer applied over a structure of concrete blocks or on steel studs.

Reinforced concrete is an ideal material for large commercial structures that are designed to blend in with older stone buildings in the Central Boston area. Reinforced concrete technology can result in a "traditionally masonry" look in part because concrete itself is a kind of man-made stone.

While traditional brick and stone facades were usually an integral part of the structure, today, the most common building system in Central Boston separates structure and facade. It uses a structural steel or concrete frame and an enclosing skin of panels. A wide range of materials can be used for panels - thinly cut stone, concrete of various thicknesses, and thin sheets of metal and glass.



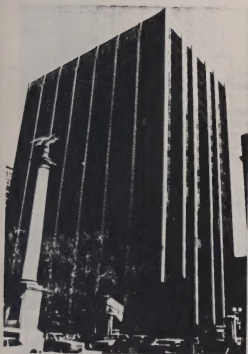


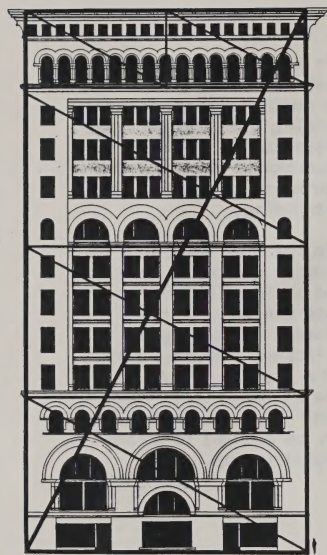
## Facade Design

### Introduction

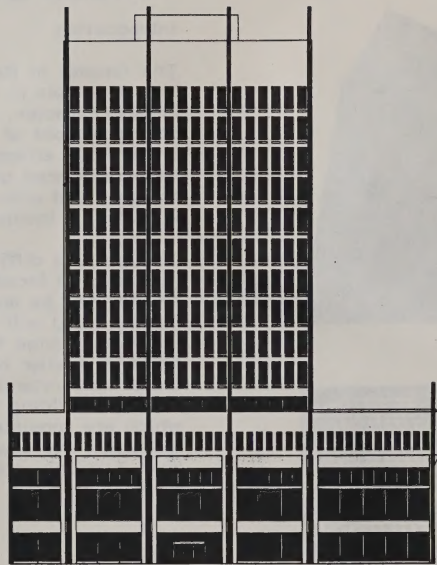
The facades of Boston's buildings play an important role in the establishment of its urban character. The word "facade" means both the front of a building and a superficial or artificial effect. Historically, facades have performed both functions, covering the building and either representing or disguising what is inside the building.

Though it is difficult to identify what is good or bad facade design, attributes of facades can be analysed to identify how a new building will fit into the city. These attributes range from larger massing gestures to smaller human-scaled features. By better understanding the aspects which create a building facade's composition, those which are consistent with Boston's traditional character and scale can be applied to attain more harmonious new construction.

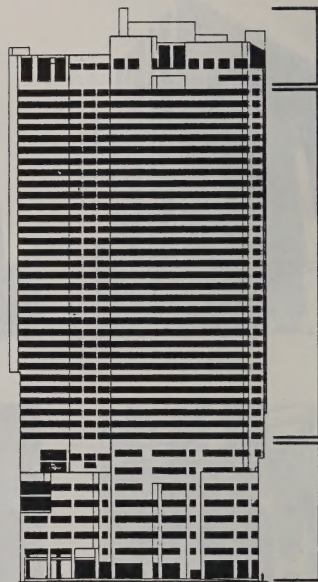




**Unifying Systems**



**Vertical Patterns**



**Horizontal Zones**

65° + 90°



## Massing

Facade design is inextricably tied to a building's massing - its overall bulk. The height and proportions of the exterior 'envelope' upon which the facade is created are the basis for the facade design. Massings are much larger today than they were 100 years ago and this difference causes the major difficulty in designing new facades which fit in with Boston's architectural heritage. Certain facade devices can slightly reduce the impact of a large building massing, helping to break it down into smaller pieces.

## Setbacks and Projections

Setbacks and projections of various sizes are the design features between massing and facade details which influence scale and character. They can produce certain sculptural and textural effects as created in the 'ziggurat' buildings and the bay and bow windows famous in Boston. They may be used formally to highlight an entrance, to recognize a corner condition, or to differentiate certain parts of a building.

## Building Lines

Major horizontal lines on building facades, such as cornices and lintel lines, create continuity along rows of buildings and imply horizontal zones within the streetscape. Vertical patterns visually subdivide a city block or a long building facade and can create a characteristic rhythm and scale for an area.







# Urban Squares

## Introduction

Urban Squares have played an important role in the historical development of Boston and continue to influence the organization and character of the city. From Copley Square to Post Office Square, from Jackson Square to North Square, from Union Square to Louisburg Square, these special features enliven the fabric of various districts and neighborhoods, contributing to their sense of identity and providing valuable public open space for formal and informal activities. As the city grows and changes, these public "rooms" become especially valuable for their continuity with the past, for their contribution to environmental quality, and for their potential as economic catalysts.

Early urban squares in Boston developed in response to the need for public gathering space. The location of marketplaces and meetinghouses was most often at the junction of two or more major streets. Gradually a space would be molded to accommodate the activity and create a forecourt for a public building.

As Boston increased in population, row house neighborhoods were developed around pre-planned open spaces. In Boston's emergence as a complex city, the role of squares as community amenities and symbols become recognized.

With the coming of the railroads and of high steel-frame buildings, urban squares became important entry and reference points in the dense city. While many of these nodes have declined in recent decades, they can be seen as a public tool for guiding the distribution of activity and investment throughout the city and for improving the legibility and attractiveness of Boston's urban pattern.



Dock Square

Church Green



Pemberton Square

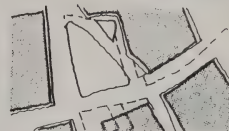
Columbia Square



Dewey Square

Park Square

# POST OFFICE SQUARE

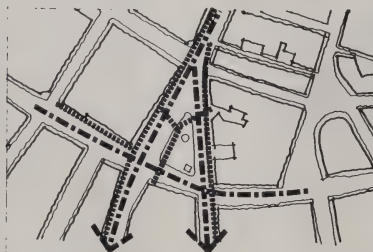


**EVOLUTION**



- Lunch Time Attraction
- Occasional Civic Events
- Pedestrian Environment

**ACTIVITY PATTERN**



- Major Pedestrian Node
- Important Vehicular Thoroughfare

**MOVEMENT PATTERN**



- Typology: "Island-Square"
- Integrated into the District Fabric
- Low Building Heights to South
- Allow Sunlight Access

**FABRIC PATTERN**

## T TYPOLOGY AND DEFINITION



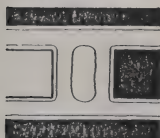
**Y-INTERSECTION**



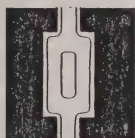
**ISLAND**



**GRID-SHIFT**



**MID-BLOCK**



**STREET WIDENING**



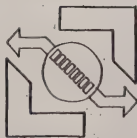
**FULL BLOCK**

An urban square is formed, often by accident, where an open space is created at an unusual alignment of city streets. Whether planned or unadvertant, an urban square is a public open space with through-traffic and a sense of enclosure which provides a reference point, a focus for activity, and a special setting for the building facades which frame it.

A square can be a special event along a thoroughfare or within a district and in cases such as Copley Square and Kenmore Square can establish the identity for an area; by its very presence creating a sense of district.

An urban square can act as a force in city development, influencing use and investment in an area. The character of each of the particular elements of an urban square creates its atmosphere and thus its role in the economic and social life of the city.

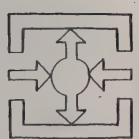
## ROLES IN THE SURROUNDINGS



**DIFFERENTIATOR**



**NODE**



**ADDRESS**



**MAGNET**



**GENERATOR**







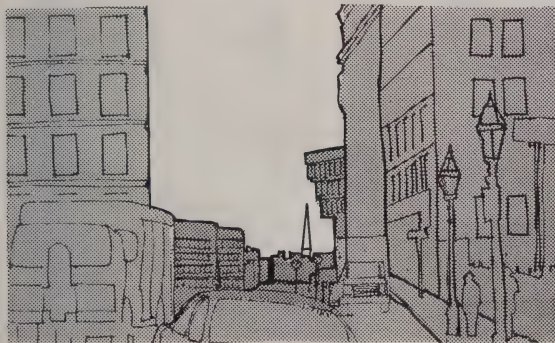
## Urban Views

### Introduction

Boston's urban views contribute to its special sense of place. Whether grand or modest, they tell us where we are and give us the impressions which create Boston's character in our minds. Although they are a very important aspect of urban design, it is not easy to guide the quality of urban views in the planning of the city because they are difficult to evaluate and control. Each person looking at a particular scene will have a different attitude towards its importance. However, there may be much consensus on the relative quality of various views once people stop to become aware of them. Urban views are difficult to control because they are created by the composite of many buildings, spaces, and features and are continuously changing for better or worse in a vital city.

Nevertheless, by more fully understanding the concept of views and its application in Boston, new development can be guided to either enhance situations or take advantage of opportunities in which the view becomes a special asset. As well, their study can help people become more aware of views and thus gain more enjoyment from being in the city.

### Enclosure and Topography

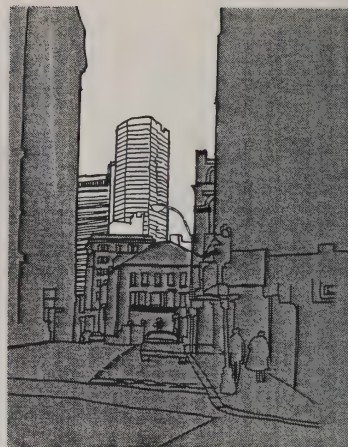


### Urban Fabric/Open Space Interplay

This sequence is characterized by the interplay and contrast between the Boston Common and the built city fabric. The two areas reinforce each other's character and the edge is an important landmark in the city.



**Framed Landmark View**



**Enclosed Layered View**



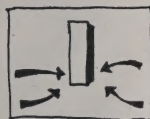
**Narrow, Truncated View**



**Green Glimpse**



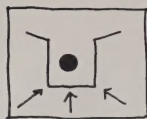
**One-sided View along Edge**



constant



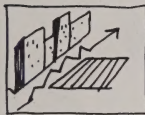
vertical



focal point



gem



edge



seam

## Landmarks



When people think of the word "view", the sight of an historical building or an expansive scene usually with water, fields, mountains, or a skyline comes to mind. In an urban setting like Boston, views such as of the State House Dome, the Bunker Hill Monument, and church steeples or views across the river, harbor, or Common are associated with the term.

The first set are landmark views where the focal point is of primary importance. The landmark serves as a "constant" - both as a reference point visible from many places and directions, often over roofs and treetops, and as a stable element of continuity which seems to have always been there as the city around it changes.

The second type of readily recognized view - those across open space or water - are highly valued by developers and building occupants. Issues of public access to the view and of the stepping of buildings back to share the view are raised in such cases.

While these two types are the rarer, more valued views, there are other situations which may be classified as views, if views are considered to be the noticeable and memorable images in the environment. These are the wide range of visual impressions which come to mind when one thinks of a place either in order to identify its character or in order to find one's way within it.









